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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,495	08/14/2001	Toshimitsu Fujiwara	018775-838	7913

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,495	FUJIWARA ET AL.	
	Examiner	Art Unit	
	Betelhem Shewareged	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 19 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on 12/31/2003 has been fully considered. Claims 18 and 19 are added, and claims 1-19 are pending. (NOTE: Claims 1-10 and 13-17 are still withdrawn from consideration as non-elected invention).

Claim Rejections - 35 USC § 102

2. Claims 11 and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Baker (WO 00/37260).

Baker discloses an image recording layer comprising a support an ink receptive layer on the support and a hardened top layer on the ink receptive layer (abstract). The top layer is equivalent to the claimed surface layer. The top layer is discontinuous (claim 17) and comprises at least a polymer of acrylic acid (claim 5), wherein such polymer is a water soluble resin. In view of applicant's specification a water swelling property is given by crosslinking a water soluble resin. Since Baker teaches hardening the top layer by adding a hardener in the top layer containing water soluble resin, the top layer of Baker has the claimed water swelling property, and allows printed materials formed thereon to be separated upon application of an aqueous solvent.

Claim Rejections - 35 USC § 103

3. Claims 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaki et al. (US 5,362,558) in view of Tomizawa et al. (US 5,985,425).

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Sakaki discloses an ink jet recording medium comprising an ink jet recording layer provided on a substrate (abstract). The ink receiving layer comprises pigments, a water soluble binder and other additives (col. 10, line 60 and col. 11, lines 24 and 41). The ink receiving layer is a discontinuous layer (claim 9). The ink receiving layer is equivalent to the claimed surface layer. Sakaki does not teach having a crosslinking agent in the ink receiving layer.

Tomizawa teaches an ink jet recording medium comprising a substrate, an ink receptive layer on the substrate, and an overcoating layer on the ink receptive layer (abstract). The ink receptive layer comprises a water soluble resin, a surface roughening agent, and a crosslinking agent (col. 3, line 43). In view of applicant's specification a water swelling property is given by crosslinking a water soluble resin. Since Tomizawa teaches the addition of crosslinking agent in the ink receiving layer containing water soluble resin, the ink receiving layer of Tomizawa has the claimed water swelling property, and allows printed materials formed thereon to be separated upon application of an aqueous solvent.

Sakaki and Tomizawa are analogous art because they are from the same field of endeavor that is the ink jet recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the ink receiving layer of Tomizawa with the invention of Sakaki in order to provide an ink receiving layer having improved water resistance property (col. 4, line 32 of **Tomizawa**).

Response to Arguments

4. Applicant's argument to the above rejections is based on that the references do not disclose the crosslinked layer is water swellable nor is there any suggestion therein that water swelling of the recording layer would be a desirable feature. Applicant's argument is not persuasive because the argument is based on a limitation that was not recited in the rejected claims. The above rejected claims do not expressly recite that controlling the conditions of cross-linking provides a water swellable property. For the above reason claims 11 and 12 stand rejected, and claim 19 is included in the rejections for the following reason. Both Baker and Sakaki disclose printing on their recording medium (see page 9, line 17 of Baker, and col. 12, line 40 of Sakaki).

Allowable Subject Matter

5. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The references do not teach or suggest the limitation recited in claim 18.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betelhem Shewareged
April 2, 2004.